

SEQUENCE LISTING

O P E JC73
MAY 07 2004
PATENT & TRADEMARK OFFICE

<110> Gaiger, Alexander
Cheever, Martin A.

<120> COMPOSITIONS AND METHODS FOR WT1
SPECIFIC IMMUNOTHERAPY

<130> 210121.465C2

<140> US 09/684,361
<141> 2000-10-06

<150> US 09/276,484
<151> 1999-03-25

<150> US 09/164,223
<151> 1998-09-30

<160> 326

<170> FastSEQ for Windows Version 3.0

<210> 1
<211> 17
<212> PRT
<213> Homo sapien

<400> 1
Arg Asp Leu Asn Ala Leu Leu Pro Ala Val Pro Ser Leu Gly Gly Gly
1 5 10 15
Gly

<210> 2
<211> 23
<212> PRT
<213> Homo sapien

<400> 2
Pro Ser Gln Ala Ser Ser Gly Gln Ala Arg Met Phe Pro Asn Ala Pro
1 5 10 15
Tyr Leu Pro Ser Cys Leu Glu
20

<210> 3
<211> 23
<212> PRT
<213> Mus musculus

<400> 3
Pro Ser Gln Ala Ser Ser Gly Gln Ala Arg Met Phe Pro Asn Ala Pro
1 5 10 15

Tyr Leu Pro Ser Cys Leu Glu
20

<210> 4
<211> 19
<212> PRT
<213> Homo sapien

<400> 4
Gly Ala Thr Leu Lys Gly Val Ala Ala Gly Ser Ser Ser Ser Val Lys
1 5 10 15
Trp Thr Glu

<210> 5
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer for PCR amplification of a human WT1

<400> 5
gagagt ctcaga cttgaa agca gt 22

<210> 6
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer for PCR amplification of a human WT1

<400> 6
ctgagcctca gcaa atggc 20

<210> 7
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer for PCR amplification of a human WT1

<400> 7
gagcat gcat gggctccgac gtgc ggg 27

<210> 8
<211> 25
<212> DNA
<213> Artificial Sequence

<220>

<223> Primer for PCR amplification of a human WT1
<400> 8
ggggtaaccca ctgaacggtc cccga 25
<210> 9
<211> 18
<212> DNA
<213> Artificial Sequence
<220>
<223> primer for PCR amplification of a mouse WT1 gene
<400> 9
tccgagccgc acctcatg 18
<210> 10
<211> 18
<212> DNA
<213> Artificial Sequence
<220>
<223> primer for PCR amplification of a mouse WT1 gene
<400> 10
gcctggatg ctggactg 18
<210> 11
<211> 27
<212> DNA
<213> Artificial Sequence
<220>
<223> primer for PCR amplification of a mouse WT1 gene
<400> 11
gagcatgcga tgggttccga cgtgcgg 27
<210> 12
<211> 29
<212> DNA
<213> Artificial Sequence
<220>
<223> primer for PCR amplification of a mouse WT1 gene
<400> 12
ggggtaacctc aaagcgccac gtggagttt 29
<210> 13
<211> 17
<212> PRT
<213> Mus musculus

<400> 13
Arg Asp Leu Asn Ala Leu Leu Pro Ala Val Ser Ser Leu Gly Gly Gly
1 5 10 15
Gly

<210> 14
<211> 19
<212> PRT
<213> Mus musculus

<400> 14
Gly Ala Thr Leu Lys Gly Met Ala Ala Gly Ser Ser Ser Ser Val Lys
1 5 10 15
Trp Thr Glu

<210> 15
<211> 15
<212> PRT
<213> Homo sapien

<400> 15
Arg Ile His Thr His Gly Val Phe Arg Gly Ile Gln Asp Val Arg
1 5 10 15

<210> 16
<211> 15
<212> PRT
<213> Mus musculus

<400> 16
Arg Ile His Thr His Gly Val Phe Arg Gly Ile Gln Asp Val Arg
1 5 10 15

<210> 17
<211> 14
<212> PRT
<213> Mus musculus

<400> 17
Val Arg Arg Val Ser Gly Val Ala Pro Thr Leu Val Arg Ser
1 5 10

<210> 18
<211> 14
<212> PRT
<213> Homo sapien

<400> 18
Val Arg Arg Val Pro Gly Val Ala Pro Thr Leu Val Arg Ser
1 5 10

<210> 19

<211> 15
 <212> PRT
 <213> Homo sapien

<400> 19
 Cys Gln Lys Lys Phe Ala Arg Ser Asp Glu Leu Val Arg His His
 1 5 10 15

<210> 20
 <211> 15
 <212> PRT
 <213> Mus musculus

<400> 20
 Cys Gln Lys Lys Phe Ala Arg Ser Asp Glu Leu Val Arg His His
 1 5 10 15

<210> 21
 <211> 21
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> sense primer for amplification of
 WT1 in mouse cell lines

<400> 21
 cccaggctgc aataagagat a 21

<210> 22
 <211> 21
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> antisense primer for amplification of
 WT1 in mouse cell lines

<400> 22
 atgttgtat ggcggaccaa t 21

<210> 23
 <211> 20
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> sense Beta Actin primer used in
 the control reactions

<400> 23
 gtggggcgcc ccaggcacca 20

<210> 24

<211> 24
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> antisense Beta Actin primer used
 in the control reactions

<400> 24
 gtccttaatg ctacgcacga tttc 24

<210> 25
 <211> 21
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Primer for use in amplifying human WT1

<400> 25
 ggcatctgag accagtgaga a 21

<210> 26
 <211> 21
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Primer for use in nested RT-PCR

<400> 26
 gctgtcccac ttacagatgc a 21

<210> 27
 <211> 21
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Primer for use in nested RT-PCR

<400> 27
 tcaaagcgcc agctggagtt t 21

<210> 28
 <211> 9
 <212> PRT
 <213> Homo sapien

<400> 28
 Ala Ala Gly Ser Ser Ser Ser Val Lys

1 5

<210> 29
<211> 9
<212> PRT
<213> Homo sapien

<400> 29
Ala Ala Gln Phe Pro Asn His Ser Phe
1 5

<210> 30
<211> 9
<212> PRT
<213> Homo sapien

<400> 30
Ala Glu Pro His Glu Glu Gln Cys Leu
1 5

<210> 31
<211> 9
<212> PRT
<213> Homo sapien

<400> 31
Ala Gly Ala Cys Arg Tyr Gly Pro Phe
1 5

<210> 32
<211> 9
<212> PRT
<213> Homo sapien

<400> 32
Ala Gly Ser Ser Ser Ser Val Lys Trp
1 5

<210> 33
<211> 9
<212> PRT
<213> Homo sapien

<400> 33
Ala Ile Arg Asn Gln Gly Tyr Ser Thr
1 5

<210> 34
<211> 9
<212> PRT
<213> Homo sapien

<400> 34
Ala Leu Leu Pro Ala Val Pro Ser Leu
1 5

<210> 35
<211> 9
<212> PRT
<213> Homo sapien

<400> 35
Ala Leu Leu Pro Ala Val Ser Ser Leu
1 5

<210> 36
<211> 9
<212> PRT
<213> Homo sapien

<400> 36
Ala Gln Phe Pro Asn His Ser Phe Lys
1 5

<210> 37
<211> 9
<212> PRT
<213> Homo sapien

<400> 37
Ala Gln Trp Ala Pro Val Leu Asp Phe
1 5

<210> 38
<211> 9
<212> PRT
<213> Homo sapien

<400> 38
Ala Arg Met Phe Pro Asn Ala Pro Tyr
1 5

<210> 39
<211> 9
<212> PRT
<213> Homo sapien

<400> 39
Ala Arg Ser Asp Glu Leu Val Arg His
1 5

<210> 40
<211> 9
<212> PRT
<213> Homo sapien

<400> 40
Ala Ser Ser Gly Gln Ala Arg Met Phe
1 5

<210> 41
<211> 9
<212> PRT
<213> Homo sapien

<400> 41
Ala Tyr Gly Ser Leu Gly Gly Pro Ala
1 5

<210> 42
<211> 9
<212> PRT
<213> Homo sapien

<400> 42
Ala Tyr Pro Gly Cys Asn Lys Arg Tyr
1 5

<210> 43
<211> 9
<212> PRT
<213> Homo sapien

<400> 43
Cys Ala Leu Pro Val Ser Gly Ala Ala
1 5

<210> 44
<211> 9
<212> PRT
<213> Homo sapien

<400> 44
Cys Ala Tyr Pro Gly Cys Asn Lys Arg
1 5

<210> 45
<211> 9
<212> PRT
<213> Homo sapien

<400> 45
Cys His Thr Pro Thr Asp Ser Cys Thr
1 5

<210> 46
<211> 9
<212> PRT
<213> Homo sapien

<400> 46
Cys Lys Thr Cys Gln Arg Lys Phe Ser
1 5

<210> 47
<211> 9
<212> PRT
<213> Homo sapien

<400> 47
Cys Leu Glu Ser Gln Pro Ala Ile Arg
1 5

<210> 48
<211> 9
<212> PRT
<213> Homo sapien

<400> 48
Cys Leu Ser Ala Phe Thr Val His Phe
1 5

<210> 49
<211> 9
<212> PRT
<213> Homo sapien

<400> 49
Cys Met Thr Trp Asn Gln Met Asn Leu
1 5

<210> 50
<211> 9
<212> PRT
<213> Homo sapien

<400> 50
Cys Arg Trp Pro Ser Cys Gln Lys Lys
1 5

<210> 51
<211> 9
<212> PRT
<213> Homo sapien

<400> 51
Cys Arg Tyr Gly Pro Phe Gly Pro Pro
1 5

<210> 52
<211> 9
<212> PRT
<213> Homo sapien

<400> 52
Cys Thr Gly Ser Gln Ala Leu Leu Leu
1 5

<210> 53
<211> 9
<212> PRT
<213> Homo sapien

<400> 53
Asp Glu Leu Val Arg His His Asn Met
1 5

<210> 54
<211> 9
<212> PRT
<213> Homo sapien

<400> 54
Asp Phe Ala Pro Pro Gly Ala Ser Ala
1 5

<210> 55
<211> 9
<212> PRT
<213> Homo sapien

<400> 55
Asp Phe Lys Asp Cys Glu Arg Arg Phe
1 5

<210> 56
<211> 9
<212> PRT
<213> Homo sapien

<400> 56
Asp Gly Thr Pro Ser Tyr Gly His Thr
1 5

<210> 57
<211> 9
<212> PRT
<213> Homo sapien

<400> 57
Asp His Leu Lys Thr His Thr Arg Thr
1 5

<210> 58
<211> 9
<212> PRT
<213> Homo sapien

<400> 58
Asp Leu Asn Ala Leu Leu Pro Ala Val
1 5

<210> 59
<211> 9
<212> PRT
<213> Homo sapien

<400> 59
Asp Pro Met Gly Gln Gln Gly Ser Leu
1 5

<210> 60
<211> 9
<212> PRT
<213> Homo sapien

<400> 60
Asp Gln Leu Lys Arg His Gln Arg Arg
1 5

<210> 61
<211> 9
<212> PRT
<213> Homo sapien

<400> 61
Asp Ser Cys Thr Gly Ser Gln Ala Leu
1 5

<210> 62
<211> 9
<212> PRT
<213> Homo sapien

<400> 62
Asp Val Arg Asp Leu Asn Ala Leu Leu
1 5

<210> 63
<211> 9
<212> PRT
<213> Homo sapien

<400> 63
Asp Val Arg Arg Val Pro Gly Val Ala
1 5

<210> 64
<211> 9
<212> PRT
<213> Homo sapien

<400> 64
Glu Asp Pro Met Gly Gln Gln Gly Ser
1 5

<210> 65
<211> 9
<212> PRT
<213> Homo sapien

<400> 65
Glu Glu Gln Cys Leu Ser Ala Phe Thr
1 5

<210> 66
<211> 9
<212> PRT
<213> Homo sapien

<400> 66
Glu Lys Pro Tyr Gln Cys Asp Phe Lys
1 5

<210> 67
<211> 9
<212> PRT
<213> Homo sapien

<400> 67
Glu Lys Arg Pro Phe Met Cys Ala Tyr
1 5

<210> 68
<211> 9
<212> PRT
<213> Homo sapien

<400> 68
Glu Pro His Glu Glu Gln Cys Leu Ser
1 5

<210> 69
<211> 9
<212> PRT
<213> Homo sapien

<400> 69
Glu Gln Cys Leu Ser Ala Phe Thr Val
1 5

<210> 70
<211> 9
<212> PRT
<213> Homo sapien

<400> 70
Glu Ser Asp Asn His Thr Ala Pro Ile
1 5

<210> 71
<211> 9
<212> PRT
<213> Homo sapien

<400> 71
Glu Ser Asp Asn His Thr Thr Pro Ile
1 5

<210> 72
<211> 9
<212> PRT
<213> Homo sapien

<400> 72
Glu Ser Gln Pro Ala Ile Arg Asn Gln
1 5

<210> 73
<211> 9
<212> PRT
<213> Homo sapien

<400> 73
Glu Thr Ser Glu Lys Arg Pro Phe Met
1 5

<210> 74
<211> 9
<212> PRT
<213> Homo sapien

<400> 74
Phe Ala Pro Pro Gly Ala Ser Ala Tyr
1 5

<210> 75
<211> 9
<212> PRT
<213> Homo sapien

<400> 75
Phe Ala Arg Ser Asp Glu Leu Val Arg
1 5

<210> 76
<211> 9
<212> PRT
<213> Homo sapien

<400> 76
Phe Gly Pro Pro Pro Pro Ser Gln Ala
1 5

<210> 77
<211> 9
<212> PRT
<213> Homo sapien

<400> 77
Phe Lys Asp Cys Glu Arg Arg Phe Ser
1 5

<210> 78
<211> 9
<212> PRT
<213> Homo sapien

<400> 78
Phe Lys Leu Ser His Leu Gln Met His
1 5

<210> 79
<211> 9
<212> PRT
<213> Homo sapien

<400> 79
Phe Pro Asn Ala Pro Tyr Leu Pro Ser
1 5

<210> 80
<211> 9
<212> PRT
<213> Homo sapien

<400> 80
Phe Gln Cys Lys Thr Cys Gln Arg Lys
1 5

<210> 81
<211> 9
<212> PRT
<213> Homo sapien

<400> 81
Phe Arg Gly Ile Gln Asp Val Arg Arg
1 5

<210> 82
<211> 9
<212> PRT
<213> Homo sapien

<400> 82
Phe Ser Gly Gln Phe Thr Gly Thr Ala
1 5

<210> 83
<211> 9
<212> PRT
<213> Homo sapien

<400> 83
Phe Ser Arg Ser Asp Gln Leu Lys Arg
1 5

<210> 84
<211> 9
<212> PRT
<213> Homo sapien

<400> 84
Phe Thr Gly Thr Ala Gly Ala Cys Arg
1 5

<210> 85
<211> 9
<212> PRT
<213> Homo sapien

<400> 85
Phe Thr Val His Phe Ser Gly Gln Phe
1 5

<210> 86
<211> 9
<212> PRT
<213> Homo sapien

<400> 86
Gly Ala Ala Gln Trp Ala Pro Val Leu
1 5

<210> 87
<211> 9
<212> PRT
<213> Homo sapien

<400> 87
Gly Ala Glu Pro His Glu Glu Gln Cys
1 5

<210> 88
<211> 9
<212> PRT
<213> Homo sapien

<400> 88
Gly Ala Thr Leu Lys Gly Val Ala Ala
1 5

<210> 89
<211> 9
<212> PRT
<213> Homo sapien

<400> 89
Gly Cys Ala Leu Pro Val Ser Gly Ala
1 5

<210> 90
<211> 9
<212> PRT
<213> Homo sapien

<400> 90
Gly Cys Asn Lys Arg Tyr Phe Lys Leu
1 5

<210> 91
<211> 9
<212> PRT
<213> Homo sapien

<400> 91
Gly Glu Lys Pro Tyr Gln Cys Asp Phe
1 5

<210> 92
<211> 9
<212> PRT
<213> Homo sapien

<400> 92
Gly Gly Gly Gly Cys Ala Leu Pro Val
1 5

<210> 93
<211> 9
<212> PRT
<213> Homo sapien

<400> 93
Gly Gly Pro Ala Pro Pro Pro Ala Pro
1 5

<210> 94
<211> 9
<212> PRT
<213> Homo sapien

<400> 94
Gly His Thr Pro Ser His His Ala Ala
1 5

<210> 95
<211> 9
<212> PRT
<213> Homo sapien

<400> 95
Gly Lys Thr Ser Glu Lys Pro Phe Ser
1 5

<210> 96
<211> 9
<212> PRT
<213> Homo sapien

<400> 96
Gly Pro Phe Gly Pro Pro Pro Pro Ser
1 5

<210> 97
<211> 9
<212> PRT
<213> Homo sapien

<400> 97
Gly Pro Pro Pro Pro Ser Gln Ala Ser
1 5

<210> 98
<211> 9
<212> PRT
<213> Homo sapien

<400> 98
Gly Gln Ala Arg Met Phe Pro Asn Ala
1 5

<210> 99
<211> 9
<212> PRT
<213> Homo sapien

<400> 99
Gly Gln Phe Thr Gly Thr Ala Gly Ala
1 5

<210> 100
<211> 9
<212> PRT
<213> Homo sapien

<400> 100
Gly Gln Ser Asn His Ser Thr Gly Tyr
1 5

<210> 101
<211> 9
<212> PRT
<213> Homo sapien

<400> 101
Gly Ser Asp Val Arg Asp Leu Asn Ala
1 5

<210> 102
<211> 9
<212> PRT
<213> Homo sapien

<400> 102
Gly Ser Gln Ala Leu Leu Leu Arg Thr
1 5

<210> 103
<211> 9
<212> PRT
<213> Homo sapien

<400> 103
Gly Val Phe Arg Gly Ile Gln Asp Val
1 5

<210> 104
<211> 9
<212> PRT
<213> Homo sapien

<400> 104
Gly Val Lys Pro Phe Gln Cys Lys Thr
1 5

<210> 105
<211> 9
<212> PRT
<213> Homo sapien

<400> 105
Gly Tyr Glu Ser Asp Asn His Thr Ala
1 5

<210> 106
<211> 9
<212> PRT
<213> Homo sapien

<400> 106
Gly Tyr Glu Ser Asp Asn His Thr Thr
1 5

<210> 107
<211> 9
<212> PRT
<213> Homo sapien

<400> 107
His Glu Glu Gln Cys Leu Ser Ala Phe
1 5

<210> 108
<211> 9
<212> PRT
<213> Homo sapien

<400> 108
His His Asn Met His Gln Arg Asn Met
1 5

<210> 109
<211> 9
<212> PRT
<213> Homo sapien

<400> 109
His Gln Arg Arg His Thr Gly Val Lys
1 5

<210> 110
<211> 9
<212> PRT
<213> Homo sapien

<400> 110
His Ser Phe Lys His Glu Asp Pro Met
1 5

<210> 111
<211> 9
<212> PRT
<213> Homo sapien

<400> 111
His Ser Arg Lys His Thr Gly Glu Lys
1 5

<210> 112
<211> 9
<212> PRT
<213> Homo sapien

<400> 112
His Thr Gly Glu Lys Pro Tyr Gln Cys
1 5

<210> 113
<211> 9
<212> PRT
<213> Homo sapien

<400> 113
His Thr His Gly Val Phe Arg Gly Ile
1 5

<210> 114
<211> 9
<212> PRT
<213> Homo sapien

<400> 114
His Thr Arg Thr His Thr Gly Lys Thr
1 5

<210> 115
<211> 9
<212> PRT
<213> Homo sapien

<400> 115
His Thr Thr Pro Ile Leu Cys Gly Ala
1 5

<210> 116
<211> 9
<212> PRT
<213> Homo sapien

<400> 116
Ile Leu Cys Gly Ala Gln Tyr Arg Ile
1 5

<210> 117
<211> 9
<212> PRT
<213> Homo sapien

<400> 117
Ile Arg Asn Gln Gly Tyr Ser Thr Val
1 5

<210> 118
<211> 9
<212> PRT
<213> Homo sapien

<400> 118
Lys Asp Cys Glu Arg Arg Phe Ser Arg
1 5

<210> 119
<211> 9
<212> PRT
<213> Homo sapien

<400> 119
Lys Phe Ala Arg Ser Asp Glu Leu Val
1 5

<210> 120
<211> 9
<212> PRT
<213> Homo sapien

<400> 120
Lys Phe Ser Arg Ser Asp His Leu Lys
1 5

<210> 121
<211> 9
<212> PRT
<213> Homo sapien

<400> 121
Lys His Glu Asp Pro Met Gly Gln Gln
1 5

<210> 122
<211> 9
<212> PRT
<213> Homo sapien

<400> 122
Lys Lys Phe Ala Arg Ser Asp Glu Leu
1 5

<210> 123
<211> 9
<212> PRT
<213> Homo sapien

<400> 123
Lys Pro Phe Ser Cys Arg Trp Pro Ser
1 5

<210> 124
<211> 9
<212> PRT
<213> Homo sapien

<400> 124
Lys Pro Tyr Gln Cys Asp Phe Lys Asp
1 5

<210> 125
<211> 9
<212> PRT
<213> Homo sapien

<400> 125
Lys Gln Glu Pro Ser Trp Gly Gly Ala
1 5

<210> 126
<211> 9
<212> PRT
<213> Homo sapien

<400> 126
Lys Arg His Gln Arg Arg His Thr Gly
1 5

<210> 127
<211> 9
<212> PRT
<213> Homo sapien

<400> 127
Lys Arg Tyr Phe Lys Leu Ser His Leu
1 5

<210> 128
<211> 9
<212> PRT
<213> Homo sapien

<400> 128
Lys Thr Cys Gln Arg Lys Phe Ser Arg
1 5

<210> 129
<211> 9
<212> PRT
<213> Homo sapien

<400> 129
Lys Thr Ser Glu Lys Pro Phe Ser Cys
1 5

<210> 130
<211> 9
<212> PRT
<213> Homo sapien

<400> 130
Leu Asp Phe Ala Pro Pro Gly Ala Ser
1 5

<210> 131
<211> 9
<212> PRT
<213> Homo sapien

<400> 131
Leu Glu Cys Met Thr Trp Asn Gln Met
1 5

<210> 132
<211> 9
<212> PRT
<213> Homo sapien

<400> 132
Leu Glu Ser Gln Pro Ala Ile Arg Asn
1 5

<210> 133
<211> 9
<212> PRT
<213> Homo sapien

<400> 133
Leu Gly Ala Thr Leu Lys Gly Val Ala
1 5

<210> 134
<211> 9
<212> PRT
<213> Homo sapien

<400> 134
Leu Gly Gly Gly Gly Cys Ala Leu
1 5

<210> 135
<211> 9
<212> PRT
<213> Homo sapien

<400> 135
Leu Lys Gly Val Ala Ala Gly Ser Ser
1 5

<210> 136
<211> 9
<212> PRT
<213> Homo sapien

<400> 136
Leu Lys Arg His Gln Arg Arg His Thr
1 5

<210> 137
<211> 9
<212> PRT
<213> Homo sapien

<400> 137
Leu Lys Thr His Thr Arg Thr His Thr
1 5

<210> 138
<211> 9
<212> PRT
<213> Homo sapien

<400> 138
Leu Pro Val Ser Gly Ala Ala Gln Trp
1 5

<210> 139
<211> 9
<212> PRT
<213> Homo sapien

<400> 139
Leu Gln Met His Ser Arg Lys His Thr
1 5

<210> 140
<211> 9
<212> PRT
<213> Homo sapien

<400> 140
Leu Arg Thr Pro Tyr Ser Ser Asp Asn
1 5

<210> 141
<211> 9
<212> PRT
<213> Homo sapien

<400> 141
Leu Ser His Leu Gln Met His Ser Arg
1 5

<210> 142
<211> 9
<212> PRT
<213> Homo sapien

<400> 142
Met Cys Ala Tyr Pro Gly Cys Asn Lys
1 5

<210> 143
<211> 9
<212> PRT
<213> Homo sapien

<400> 143
Met His Gln Arg Asn Met Thr Lys Leu
1 5

<210> 144
<211> 9
<212> PRT
<213> Homo sapien

<400> 144
Asn Ala Pro Tyr Leu Pro Ser Cys Leu
1 5

<210> 145
<211> 9
<212> PRT
<213> Homo sapien

<400> 145
Asn Lys Arg Tyr Phe Lys Leu Ser His
1 5

<210> 146
<211> 9
<212> PRT
<213> Homo sapien

<400> 146
Asn Leu Gly Ala Thr Leu Lys Gly Val
1 5

<210> 147
<211> 9
<212> PRT
<213> Homo sapien

<400> 147
Asn Leu Tyr Gln Met Thr Ser Gln Leu
1 5

<210> 148
<211> 9
<212> PRT
<213> Homo sapien

<400> 148
Asn Met His Gln Arg Asn Met Thr Lys
1 5

<210> 149
<211> 9
<212> PRT
<213> Homo sapien

<400> 149
Asn Met Thr Lys Leu Gln Leu Ala Leu
1 5

<210> 150
<211> 9
<212> PRT
<213> Homo sapien

<400> 150
Asn Gln Gly Tyr Ser Thr Val Thr Phe
1 5

<210> 151
<211> 9
<212> PRT
<213> Homo sapien

<400> 151
Asn Gln Met Asn Leu Gly Ala Thr Leu
1 5

<210> 152
<211> 9
<212> PRT
<213> Homo sapien

<400> 152
Pro Ala Ile Arg Asn Gln Gly Tyr Ser
1 5

<210> 153
<211> 9
<212> PRT
<213> Homo sapien

<400> 153
Pro Gly Ala Ser Ala Tyr Gly Ser Leu
1 5

<210> 154
<211> 9
<212> PRT
<213> Homo sapien

<400> 154
Pro His Glu Glu Gln Cys Leu Ser Ala
1 5

<210> 155
<211> 9
<212> PRT
<213> Homo sapien

<400> 155
Pro Ile Leu Cys Gly Ala Gln Tyr Arg
1 5

<210> 156
<211> 9
<212> PRT
<213> Homo sapien

<400> 156
Pro Pro Pro Pro His Ser Phe Ile Lys
1 5

<210> 157
<211> 9
<212> PRT
<213> Homo sapien

<400> 157
Pro Pro Pro Pro Pro His Ser Phe Ile
1 5

<210> 158
<211> 9
<212> PRT
<213> Homo sapien

<400> 158
Pro Pro Pro Pro Pro Pro His Ser Phe
1 5

<210> 159
<211> 9
<212> PRT
<213> Homo sapien

<400> 159
Pro Ser Cys Gln Lys Lys Phe Ala Arg
1 5

<210> 160
<211> 9
<212> PRT
<213> Homo sapien

<400> 160
Gln Ala Leu Leu Leu Arg Thr Pro Tyr
1 5

<210> 161
<211> 9
<212> PRT
<213> Homo sapien

<400> 161
Gln Ala Ser Ser Gly Gln Ala Arg Met
1 5

<210> 162
<211> 9
<212> PRT
<213> Homo sapien

<400> 162
Gln Cys Asp Phe Lys Asp Cys Glu Arg
1 5

<210> 163
<211> 9
<212> PRT
<213> Homo sapien

<400> 163
Gln Cys Lys Thr Cys Gln Arg Lys Phe
1 5

<210> 164
<211> 9
<212> PRT
<213> Homo sapien

<400> 164
Gln Asp Val Arg Arg Val Pro Gly Val
1 5

<210> 165
<211> 9
<212> PRT
<213> Homo sapien

<400> 165
Gln Phe Thr Gly Thr Ala Gly Ala Cys
1 5

<210> 166
<211> 9
<212> PRT
<213> Homo sapien

<400> 166
Gln Gly Ser Leu Gly Glu Gln Gln Tyr
1 5

<210> 167
<211> 9
<212> PRT
<213> Homo sapien

<400> 167
Gln Leu Glu Cys Met Thr Trp Asn Gln
1 5

<210> 168
<211> 9
<212> PRT
<213> Homo sapien

<400> 168
Gln Met Asn Leu Gly Ala Thr Leu Lys
1 5

<210> 169
<211> 9
<212> PRT
<213> Homo sapien

<400> 169
Gln Met Thr Ser Gln Leu Glu Cys Met
1 5

<210> 170
<211> 9
<212> PRT
<213> Homo sapien

<400> 170
Gln Pro Ala Ile Arg Asn Gln Gly Tyr
1 5

<210> 171
<211> 9
<212> PRT
<213> Homo sapien

<400> 171
Gln Gln Tyr Ser Val Pro Pro Pro Val
1 5

<210> 172
<211> 9
<212> PRT
<213> Homo sapien

<400> 172
Gln Arg Lys Phe Ser Arg Ser Asp His
1 5

<210> 173
<211> 9
<212> PRT
<213> Homo sapien

<400> 173
Gln Arg Asn Met Thr Lys Leu Gln Leu
1 5

<210> 174
<211> 9
<212> PRT
<213> Homo sapien

<400> 174
Gln Trp Ala Pro Val Leu Asp Phe Ala
1 5

<210> 175
<211> 9
<212> PRT
<213> Homo sapien

<400> 175
Gln Tyr Arg Ile His Thr His Gly Val
1 5

<210> 176
<211> 9
<212> PRT
<213> Homo sapien

<400> 176
Gln Tyr Ser Val Pro Pro Pro Val Tyr
1 5

<210> 177
<211> 9
<212> PRT
<213> Homo sapien

<400> 177
Arg Asp Leu Asn Ala Leu Leu Pro Ala
1 5

<210> 178
<211> 9
<212> PRT
<213> Homo sapien

<400> 178
Arg Phe Ser Arg Ser Asp Gln Leu Lys
1 5

<210> 179
<211> 9
<212> PRT
<213> Homo sapien

<400> 179
Arg Gly Ile Gln Asp Val Arg Arg Val
1 5

<210> 180
<211> 9
<212> PRT
<213> Homo sapien

<400> 180
Arg His His Asn Met His Gln Arg Asn
1 5

<210> 181
<211> 9
<212> PRT
<213> Homo sapien

<400> 181
Arg His Gln Arg Arg His Thr Gly Val
1 5

<210> 182
<211> 9
<212> PRT
<213> Homo sapien

<400> 182
Arg Ile His Thr His Gly Val Phe Arg
1 5

<210> 183
<211> 9
<212> PRT
<213> Homo sapien

<400> 183
Arg Lys Phe Ser Arg Ser Asp His Leu
1 5

<210> 184
<211> 9
<212> PRT
<213> Homo sapien

<400> 184
Arg Lys His Thr Gly Glu Lys Pro Tyr
1 5

<210> 185
<211> 9
<212> PRT
<213> Homo sapien

<400> 185
Arg Met Phe Pro Asn Ala Pro Tyr Leu
1 5

<210> 186
<211> 9
<212> PRT
<213> Homo sapien

<400> 186
Arg Asn Met Thr Lys Leu Gin Leu Ala
1 5

<210> 187
<211> 9
<212> PRT
<213> Homo sapien

<400> 187
Arg Arg Phe Ser Arg Ser Asp Gln Leu
1 5

<210> 188
<211> 9
<212> PRT
<213> Homo sapien

<400> 188
Arg Arg His Thr Gly Val Lys Pro Phe
1 5

<210> 189
<211> 9
<212> PRT
<213> Homo sapien

<400> 189
Arg Arg Val Pro Gly Val Ala Pro Thr
1 5

<210> 190
<211> 9
<212> PRT
<213> Homo sapien

<400> 190
Arg Ser Ala Ser Glu Thr Ser Glu Lys
1 5

<210> 191
<211> 9
<212> PRT
<213> Homo sapien

<400> 191
Arg Ser Asp Glu Leu Val Arg His His
1 5

<210> 192
<211> 9
<212> PRT
<213> Homo sapien

<400> 192
Arg Ser Asp His Leu Lys Thr His Thr
1 5

<210> 193
<211> 9
<212> PRT
<213> Homo sapien

<400> 193
Arg Ser Asp Gln Leu Lys Arg His Gln
1 5

<210> 194
<211> 9
<212> PRT
<213> Homo sapien

<400> 194
Arg Thr Pro Tyr Ser Ser Asp Asn Leu
1 5

<210> 195
<211> 9
<212> PRT
<213> Homo sapien

<400> 195
Arg Val Pro Gly Val Ala Pro Thr Leu
1 5

<210> 196
<211> 9
<212> PRT
<213> Homo sapien

<400> 196
Arg Trp Pro Ser Cys Gln Lys Lys Phe
1 5

<210> 197
<211> 9
<212> PRT
<213> Homo sapien

<400> 197
Ser Ala Ser Glu Thr Ser Glu Lys Arg
1 5

<210> 198
<211> 9
<212> PRT
<213> Homo sapien

<400> 198
Ser Cys Leu Glu Ser Gln Pro Ala Ile
1 5

<210> 199
<211> 9
<212> PRT
<213> Homo sapien

<400> 199
Ser Cys Leu Glu Ser Gln Pro Thr Ile
1 5

<210> 200
<211> 9
<212> PRT
<213> Homo sapien

<400> 200
Ser Cys Gln Lys Lys Phe Ala Arg Ser
1 5

<210> 201
<211> 9
<212> PRT
<213> Homo sapien

<400> 201
Ser Cys Arg Trp Pro Ser Cys Gln Lys
1 5

<210> 202
<211> 9
<212> PRT
<213> Homo sapien

<400> 202
Ser Cys Thr Gly Ser Gln Ala Leu Leu
1 5

<210> 203
<211> 9
<212> PRT
<213> Homo sapien

<400> 203
Ser Asp Glu Leu Val Arg His His Asn
1 5

<210> 204
<211> 9
<212> PRT
<213> Homo sapien

<400> 204
Ser Asp Asn His Thr Thr Pro Ile Leu
1 5

<210> 205
<211> 9
<212> PRT
<213> Homo sapien

<400> 205
Ser Asp Asn Leu Tyr Gln Met Thr Ser
1 5

<210> 206
<211> 9
<212> PRT
<213> Homo sapien

<400> 206
Ser Asp Val Arg Asp Leu Asn Ala Leu
1 5

<210> 207
<211> 9
<212> PRT
<213> Homo sapien

<400> 207
Ser Glu Lys Pro Phe Ser Cys Arg Trp
1 5

<210> 208
<211> 9
<212> PRT
<213> Homo sapien

<400> 208
Ser Glu Lys Arg Pro Phe Met Cys Ala
1 5

<210> 209
<211> 9
<212> PRT
<213> Homo sapien

<400> 209
Ser Glu Thr Ser Glu Lys Arg Pro Phe
1 5

<210> 210
<211> 9
<212> PRT
<213> Homo sapien

<400> 210
Ser Phe Ile Lys Gln Glu Pro Ser Trp
1 5

<210> 211
<211> 9
<212> PRT
<213> Homo sapien

<400> 211
Ser Gly Ala Ala Gln Trp Ala Pro Val
1 5

<210> 212
<211> 9
<212> PRT
<213> Homo sapien

<400> 212
Ser Gly Gln Ala Arg Met Phe Pro Asn
1 5

<210> 213
<211> 9
<212> PRT
<213> Homo sapien

<400> 213
Ser His His Ala Ala Gln Phe Pro Asn
1 5

<210> 214
<211> 9
<212> PRT
<213> Homo sapien

<400> 214
Ser Leu Gly Glu Gln Gln Tyr Ser Val
1 5

<210> 215
<211> 9
<212> PRT
<213> Homo sapien

<400> 215
Ser Leu Gly Gly Gly Gly Cys Ala
1 5

<210> 216
<211> 9
<212> PRT
<213> Homo sapien

<400> 216
Ser Gln Ala Ser Ser Gly Gln Ala Arg
1 5

<210> 217
<211> 9
<212> PRT
<213> Homo sapien

<400> 217
Ser Ser Asp Asn Leu Tyr Gln Met Thr
1 5

<210> 218
<211> 9
<212> PRT
<213> Homo sapien

<400> 218
Ser Val Pro Pro Pro Val Tyr Gly Cys
1 5

<210> 219
<211> 9
<212> PRT
<213> Homo sapien

<400> 219
Thr Cys Gln Arg Lys Phe Ser Arg Ser
1 5

<210> 220
<211> 9
<212> PRT
<213> Homo sapien

<400> 220
Thr Asp Ser Cys Thr Gly Ser Gln Ala
1 5

<210> 221
<211> 9
<212> PRT
<213> Homo sapien

<400> 221
Thr Glu Gly Gln Ser Asn His Ser Thr
1 5

<210> 222
<211> 9
<212> PRT
<213> Homo sapien

<400> 222
Thr Gly Lys Thr Ser Glu Lys Pro Phe
1 5

<210> 223
<211> 9
<212> PRT
<213> Homo sapien

<400> 223
Thr Gly Ser Gln Ala Leu Leu Leu Arg
1 5

<210> 224
<211> 9
<212> PRT
<213> Homo sapien

<400> 224
Thr Gly Thr Ala Gly Ala Cys Arg Tyr
1 5

<210> 225
<211> 9
<212> PRT
<213> Homo sapien

<400> 225
Thr Gly Tyr Glu Ser Asp Asn His Thr
1 5

<210> 226
<211> 9
<212> PRT
<213> Homo sapien

<400> 226
Thr Leu Val Arg Ser Ala Ser Glu Thr
1 5

<210> 227
<211> 9
<212> PRT
<213> Homo sapien

<400> 227
Thr Pro Ile Leu Cys Gly Ala Gln Tyr
1 5

<210> 228
<211> 9
<212> PRT
<213> Homo sapien

<400> 228
Thr Pro Ser His His Ala Ala Gln Phe
1 5

<210> 229
<211> 9
<212> PRT
<213> Homo sapien

<400> 229
Thr Pro Ser Tyr Gly His Thr Pro Ser
1 5

<210> 230
<211> 9
<212> PRT
<213> Homo sapien

<400> 230
Thr Pro Thr Asp Ser Cys Thr Gly Ser
1 5

<210> 231
<211> 9
<212> PRT
<213> Homo sapien

<400> 231
Thr Pro Tyr Ser Ser Asp Asn Leu Tyr
1 5

<210> 232
<211> 9
<212> PRT
<213> Homo sapien

<400> 232
Thr Ser Glu Lys Pro Phe Ser Cys Arg
1 5

<210> 233
<211> 9
<212> PRT
<213> Homo sapien

<400> 233
Thr Ser Glu Lys Arg Pro Phe Met Cys
1 5

<210> 234
<211> 9
<212> PRT
<213> Homo sapien

<400> 234
Thr Ser Gln Leu Glu Cys Met Thr Trp
1 5

<210> 235
<211> 9
<212> PRT
<213> Homo sapien

<400> 235
Thr Val His Phe Ser Gly Gln Phe Thr
1 5

<210> 236
<211> 9
<212> PRT
<213> Homo sapien

<400> 236
Val Ala Ala Gly Ser Ser Ser Val
1 5

<210> 237
<211> 9
<212> PRT
<213> Homo sapien

<400> 237
Val Ala Pro Thr Leu Val Arg Ser Ala
1 5

<210> 238
<211> 9
<212> PRT
<213> Homo sapien

<400> 238
Val Phe Arg Gly Ile Gln Asp Val Arg
1 5

<210> 239
<211> 9
<212> PRT
<213> Homo sapien

<400> 239
Val Lys Pro Phe Gln Cys Lys Thr Cys
1 5

<210> 240
<211> 9
<212> PRT
<213> Homo sapien

<400> 240
Val Lys Trp Thr Glu Gly Gln Ser Asn
1 5

<210> 241
<211> 9
<212> PRT
<213> Homo sapien

<400> 241
Val Leu Asp Phe Ala Pro Pro Gly Ala
1 5

<210> 242
<211> 9
<212> PRT
<213> Homo sapien

<400> 242
Val Pro Gly Val Ala Pro Thr Leu Val
1 5

<210> 243
<211> 9
<212> PRT
<213> Homo sapien

<400> 243
Val Arg His His Asn Met His Gln Arg
1 5

<210> 244
<211> 9
<212> PRT
<213> Homo sapien

<400> 244
Val Thr Phe Asp Gly Thr Pro Ser Tyr
1 5

<210> 245
<211> 9
<212> PRT
<213> Homo sapien

<400> 245
Trp Asn Gln Met Asn Leu Gly Ala Thr
1 5

<210> 246
<211> 9
<212> PRT
<213> Homo sapien

<400> 246
Trp Pro Ser Cys Gln Lys Lys Phe Ala
1 5

<210> 247
<211> 9
<212> PRT
<213> Homo sapien

<400> 247
Trp Thr Glu Gly Gln Ser Asn His Ser
1 5

<210> 248
<211> 9
<212> PRT
<213> Homo sapien

<400> 248
Tyr Phe Lys Leu Ser His Leu Gln Met
1 5

<210> 249
<211> 9
<212> PRT
<213> Homo sapien

<400> 249
Tyr Gly His Thr Pro Ser His His Ala
1 5

<210> 250
<211> 9
<212> PRT
<213> Homo sapien

<400> 250
Tyr Pro Gly Cys Asn Lys Arg Tyr Phe
1 5

<210> 251
<211> 9
<212> PRT
<213> Homo sapien

<400> 251
Tyr Gln Met Thr Ser Gln Leu Glu Cys
1 5

<210> 252
<211> 9
<212> PRT
<213> Homo sapien

<400> 252
Tyr Arg Ile His Thr His Gly Val Phe
1 5

<210> 253
<211> 9
<212> PRT
<213> Homo sapien

<400> 253
Tyr Ser Ser Asp Asn Leu Tyr Gln Met
1 5

<210> 254
<211> 9
<212> PRT
<213> Mus musculus

<400> 254
Ala Glu Pro His Glu Glu Gln Cys Leu
1 5

<210> 255
<211> 9
<212> PRT
<213> Mus musculus

<400> 255
Ala Leu Leu Pro Ala Val Ser Ser Leu
1 5

<210> 256
<211> 9
<212> PRT
<213> Mus musculus

<400> 256
Ala Tyr Gly Ser Leu Gly Gly Pro Ala
1 5

<210> 257
<211> 9
<212> PRT
<213> Mus musculus

<400> 257
Ala Tyr Pro Gly Cys Asn Lys Arg Tyr
1 5

<210> 258
<211> 9
<212> PRT
<213> Mus musculus

<400> 258
Cys Met Thr Trp Asn Gln Met Asn Leu
1 5

<210> 259
<211> 9
<212> PRT
<213> Mus musculus

<400> 259
Cys Thr Gly Ser Gln Ala Leu Leu Leu
1 5

<210> 260
<211> 9
<212> PRT
<213> Mus musculus

<400> 260
Asp Gly Ala Pro Ser Tyr Gly His Thr
1 5

<210> 261
<211> 9
<212> PRT
<213> Mus musculus

<400> 261
Asp Leu Asn Ala Leu Leu Pro Ala Val
1 5

<210> 262
<211> 9
<212> PRT
<213> Mus musculus

<400> 262
Asp Pro Met Gly Gln Gln Gly Ser Leu
1 5

<210> 263
<211> 9
<212> PRT
<213> Mus musculus

<400> 263
Asp Ser Cys Thr Gly Ser Gln Ala Leu
1 5

<210> 264
<211> 9
<212> PRT
<213> Mus musculus

<400> 264
Asp Val Arg Asp Leu Asn Ala Leu Leu
1 5

<210> 265
<211> 9
<212> PRT
<213> Mus musculus

<400> 265
Glu Gln Cys Leu Ser Ala Phe Thr Leu
1 5

<210> 266
<211> 9
<212> PRT
<213> Mus musculus

<400> 266
Glu Ser Asp Asn His Thr Ala Pro Ile
1 5

<210> 267
<211> 9
<212> PRT
<213> Mus musculus

<400> 267
Phe Pro Asn Ala Pro Tyr Leu Pro Ser
1 5

<210> 268
<211> 9
<212> PRT
<213> Mus musculus

<400> 268
Gly Cys Asn Lys Arg Tyr Phe Lys Leu
1 5

<210> 269
<211> 9
<212> PRT
<213> Mus musculus

<400> 269
Gly Gln Ala Arg Met Phe Pro Asn Ala
1 5

<210> 270
<211> 9
<212> PRT
<213> Mus musculus

<400> 270
Gly Val Phe Arg Gly Ile Gln Asp Val
1 5

<210> 271
<211> 9
<212> PRT
<213> Mus musculus

<400> 271
Gly Tyr Glu Ser Asp Asn His Thr Ala
1 5

<210> 272
<211> 9
<212> PRT
<213> Mus musculus

<400> 272
His Ser Phe Lys His Glu Asp Pro Met
1 5

<210> 273
<211> 9
<212> PRT
<213> Mus musculus

<400> 273
His Thr His Gly Val Phe Arg Gly Ile
1 5

<210> 274
<211> 9
<212> PRT
<213> Mus musculus

<400> 274
Ile Leu Cys Gly Ala Gln Tyr Arg Ile
1 5

<210> 275
<211> 9
<212> PRT
<213> Mus musculus

<400> 275
Lys Phe Ala Arg Ser Asp Glu Leu Val
1 5

<210> 276
<211> 9
<212> PRT
<213> Mus musculus

<400> 276
Lys Arg Tyr Phe Lys Leu Ser His Leu
1 5

<210> 277
<211> 9
<212> PRT
<213> Mus musculus

<400> 277
Lys Thr Ser Glu Lys Pro Phe Ser Cys
1 5

<210> 278
<211> 9
<212> PRT
<213> Mus musculus

<400> 278
Leu Glu Cys Met Thr Trp Asn Gln Met
1 5

<210> 279
<211> 9
<212> PRT
<213> Mus musculus

<400> 279
Leu Gly Gly Gly Gly Cys Gly Leu
1 5

<210> 280
<211> 9
<212> PRT
<213> Mus musculus

<400> 280
Leu Gln Met His Ser Arg Lys His Thr
1 5

<210> 281
<211> 9
<212> PRT
<213> Mus musculus

<400> 281
Met His Gln Arg Asn Met Thr Lys Leu
1 5

<210> 282
<211> 9
<212> PRT
<213> Mus musculus

<400> 282
Asn Ala Pro Tyr Leu Pro Ser Cys Leu
1 5

<210> 283
<211> 9
<212> PRT
<213> Mus musculus

<400> 283
Asn Leu Gly Ala Thr Leu Lys Gly Met
1 5

<210> 284
<211> 9
<212> PRT
<213> Mus musculus

<400> 284
Asn Leu Tyr Gln Met Thr Ser Gln Leu
1 5

<210> 285
<211> 9
<212> PRT
<213> Mus musculus

<400> 285
Asn Met Thr Lys Leu His Val Ala Leu
1 5

<210> 286
<211> 9
<212> PRT
<213> Mus musculus

<400> 286
Asn Gln Met Asn Leu Gly Ala Thr Leu
1 5

<210> 287
<211> 9
<212> PRT
<213> Mus musculus

<400> 287
Pro Gly Ala Ser Ala Tyr Gly Ser Leu
1 5

<210> 288
<211> 9
<212> PRT
<213> Mus musculus

<400> 288
Gln Ala Ser Ser Gly Gln Ala Arg Met
1 5

<210> 289
<211> 9
<212> PRT
<213> Mus musculus

<400> 289
Gln Met Thr Ser Gln Leu Glu Cys Met
1 5

<210> 290
<211> 9
<212> PRT
<213> Mus musculus

<400> 290
Gln Gln Tyr Ser Val Pro Pro Pro Val
1 5

<210> 291
<211> 9
<212> PRT
<213> Mus musculus

<400> 291
Gln Tyr Arg Ile His Thr His Gly Val
1 5

<210> 292
<211> 9
<212> PRT
<213> Mus musculus

<400> 292
Gln Tyr Ser Val Pro Pro Pro Val Tyr
1 5

<210> 293
<211> 9
<212> PRT
<213> Mus musculus

<400> 293
Arg Met Phe Pro Asn Ala Pro Tyr Leu
1 5

<210> 294
<211> 9
<212> PRT
<213> Mus musculus

<400> 294
Arg Thr Pro Tyr Ser Ser Asp Asn Leu
1 5

<210> 295
<211> 9
<212> PRT
<213> Mus musculus

<400> 295
Arg Val Ser Gly Val Ala Pro Thr Leu
1 5

<210> 296
<211> 9
<212> PRT
<213> Mus musculus

<400> 296
Ser Cys Leu Glu Ser Gln Pro Thr Ile
1 5

<210> 297
<211> 9
<212> PRT
<213> Mus musculus

<400> 297
Ser Cys Gln Lys Lys Phe Ala Arg Ser
1 5

<210> 298
<211> 9
<212> PRT
<213> Mus musculus

<400> 298
Ser Asp Val Arg Asp Leu Asn Ala Leu
1 5

<210> 299
<211> 9
<212> PRT
<213> Mus musculus

<400> 299
Ser Leu Gly Glu Gln Gln Tyr Ser Val
1 5

<210> 300
<211> 9
<212> PRT
<213> Mus musculus

<400> 300
Thr Cys Gln Arg Lys Phe Ser Arg Ser
1 5

<210> 301
<211> 9
<212> PRT
<213> Mus musculus

<400> 301
Thr Glu Gly Gln Ser Asn His Gly Ile
1 5

<210> 302
<211> 9
<212> PRT
<213> Mus musculus

<400> 302
Thr Leu His Phe Ser Gly Gln Phe Thr
1 5

<210> 303
<211> 9
<212> PRT
<213> Mus musculus

<400> 303
Thr Leu Val Arg Ser Ala Ser Glu Thr
1 5

<210> 304
<211> 9
<212> PRT
<213> Mus musculus

<400> 304
Val Leu Asp Phe Ala Pro Pro Gly Ala
1 5

<210> 305
<211> 9
<212> PRT
<213> Mus musculus

<400> 305
Trp Asn Gln Met Asn Leu Gly Ala Thr
1 5

<210> 306
<211> 9
<212> PRT
<213> Mus musculus

<400> 306
Tyr Phe Lys Leu Ser His Leu Gln Met
1 5

<210> 307
<211> 9
<212> PRT
<213> Mus musculus

<400> 307
Tyr Gln Met Thr Ser Gln Leu Glu Cys
1 5

<210> 308
<211> 9
<212> PRT
<213> Mus musculus

<400> 308
Tyr Ser Ser Asp Asn Leu Tyr Gln Met
1 5

<210> 309
<211> 6
<212> PRT
<213> Homo sapien

<400> 309
Gly Ala Ala Gln Trp Ala
1 5

<210> 310
<211> 12
<212> PRT
<213> Homo sapien

<400> 310
Ala Ser Ala Tyr Gly Ser Leu Gly Gly Pro Ala Pro
1 5 10

<210> 311
 <211> 15
 <212> PRT
 <213> Homo sapien

<400> 311
 Ala Phe Thr Val His Phe Ser Gly Gln Phe Thr Gly Thr Ala Gly
 1 5 10 15

<210> 312
 <211> 5
 <212> PRT
 <213> Homo sapien

<400> 312
 His Ala Ala Gln Phe
 1 5

<210> 313
 <211> 32
 <212> PRT
 <213> Homo sapien

<400> 313
 Cys His Thr Pro Thr Asp Ser Cys Thr Gly Ser Gln Ala Leu Leu Leu
 1 5 10 15

Arg Thr Pro Tyr Ser Ser Asp Asn Leu Tyr Gln Met Thr Ser Gln Leu
 20 25 30

<210> 314
 <211> 32
 <212> PRT
 <213> Homo sapien

<400> 314
 Arg Ile His Thr His Gly Val Phe Arg Gly Ile Gln Asp Val Arg Arg
 1 5 10 15

Val Pro Gly Val Ala Pro Thr Leu Val Arg Ser Ala Ser Glu Thr Ser
 20 25 30

<210> 315
 <211> 4
 <212> PRT
 <213> Homo sapien

<400> 315
 Arg Tyr Phe Lys
 1

<210> 316
 <211> 14
 <212> PRT
 <213> Homo sapien

<400> 316
 Glu Arg Arg Phe Ser Arg Ser Asp Gln Leu Lys Arg His Gln
 1 5 10

<210> 317
 <211> 22
 <212> PRT
 <213> Homo sapien

<400> 317
 Gln Arg Lys Phe Ser Arg Ser Asp His Leu Lys Thr His Thr Arg Thr
 1 5 10 15

His Thr Gly Lys Thr Ser
 20

<210> 318
 <211> 21
 <212> PRT
 <213> Homo sapien

<400> 318
 Cys Gln Lys Lys Phe Ala Arg Ser Asp Glu Leu Val Arg His His Asn
 1 5 10 15

Met His Gln Arg Asn
 20

<210> 319
 <211> 449
 <212> PRT
 <213> Homo sapien

<400> 319
 Met Gly Ser Asp Val Arg Asp Leu Asn Ala Leu Leu Pro Ala Val Pro
 1 5 10 15

Ser Leu Gly Gly Gly Gly Cys Ala Leu Pro Val Ser Gly Ala Ala
 20 25 30

Gln Trp Ala Pro Val Leu Asp Phe Ala Pro Pro Gly Ala Ser Ala Tyr
 35 40 45

Gly Ser Leu Gly Gly Pro Ala Pro Pro Pro Ala Pro Pro Pro Pro Pro
 50 55 60

Pro Pro Pro Pro His Ser Phe Ile Lys Gln Glu Pro Ser Trp Gly Gly
 65 70 75 80

Ala Glu Pro His Glu Glu Gln Cys Leu Ser Ala Phe Thr Val His Phe
 85 90 95

Ser Gly Gln Phe Thr Gly Thr Ala Gly Ala Cys Arg Tyr Gly Pro Phe
 100 105 110

Gly Pro Pro Pro Ser Gln Ala Ser Ser Gly Gln Ala Arg Met Phe
 115 120 125

Pro Asn Ala Pro Tyr Leu Pro Ser Cys Leu Glu Ser Gln Pro Ala Ile
 130 135 140

Arg Asn Gln Gly Tyr Ser Thr Val Thr Phe Asp Gly Thr Pro Ser Tyr
 145 150 155 160

Gly His Thr Pro Ser His His Ala Ala Gln Phe Pro Asn His Ser Phe

165	170	175
Lys His Glu Asp Pro Met Gly Gln Gln	Gly Ser Leu Gly Glu Gln Gln	
180	185	190
Tyr Ser Val Pro Pro Val Tyr Gly Cys His Thr Pro Thr Asp Ser		
195	200	205
Cys Thr Gly Ser Gln Ala Leu Leu Leu Arg Thr Pro Tyr Ser Ser Asp		
210	215	220
Asn Leu Tyr Gln Met Thr Ser Gln Leu Glu Cys Met Thr Trp Asn Gln		
225	230	235
Met Asn Leu Gly Ala Thr Leu Lys Gly Val Ala Ala Gly Ser Ser Ser		
245	250	255
Ser Val Lys Trp Thr Glu Gly Gln Ser Asn His Ser Thr Gly Tyr Glu		
260	265	270
Ser Asp Asn His Thr Thr Pro Ile Leu Cys Gly Ala Gln Tyr Arg Ile		
275	280	285
His Thr His Gly Val Phe Arg Gly Ile Gln Asp Val Arg Arg Val Pro		
290	295	300
Gly Val Ala Pro Thr Leu Val Arg Ser Ala Ser Glu Thr Ser Glu Lys		
305	310	315
Arg Pro Phe Met Cys Ala Tyr Pro Gly Cys Asn Lys Arg Tyr Phe Lys		
325	330	335
Leu Ser His Leu Gln Met His Ser Arg Lys His Thr Gly Glu Lys Pro		
340	345	350
Tyr Gln Cys Asp Phe Lys Asp Cys Glu Arg Arg Phe Ser Arg Ser Asp		
355	360	365
Gln Leu Lys Arg His Gln Arg Arg His Thr Gly Val Lys Pro Phe Gln		
370	375	380
Cys Lys Thr Cys Gln Arg Lys Phe Ser Arg Ser Asp His Leu Lys Thr		
385	390	395
His Thr Arg Thr His Thr Gly Lys Thr Ser Glu Lys Pro Phe Ser Cys		
405	410	415
Arg Trp Pro Ser Cys Gln Lys Lys Phe Ala Arg Ser Asp Glu Leu Val		
420	425	430
Arg His His Asn Met His Gln Arg Asn Met Thr Lys Leu Gln Leu Ala		
435	440	445
Leu		

<210> 320
 <211> 449
 <212> PRT
 <213> Mus musculus

<400> 320			
Met Gly Ser Asp Val Arg Asp Leu Asn Ala Leu Leu Pro Ala Val Ser			
1	5	10	15
Ser Leu Gly Gly Gly Gly Cys Gly Leu Pro Val Ser Gly Ala Ala			
20	25	30	
Gln Trp Ala Pro Val Leu Asp Phe Ala Pro Pro Gly Ala Ser Ala Tyr			
35	40	45	
Gly Ser Leu Gly Gly Pro Ala Pro Pro Pro Ala Pro Pro Pro Pro Pro			
50	55	60	
Pro Pro Pro Pro His Ser Phe Ile Lys Gln Glu Pro Ser Trp Gly Gly			
65	70	75	80

Ala Glu Pro His Glu Glu Gln Cys Leu Ser Ala Phe Thr Leu His Phe
 85 90 95
 Ser Gly Gln Phe Thr Gly Thr Ala Gly Ala Cys Arg Tyr Gly Pro Phe
 100 105 110
 Gly Pro Pro Pro Pro Ser Gln Ala Ser Ser Gly Gln Ala Arg Met Phe
 115 120 125
 Pro Asn Ala Pro Tyr Leu Pro Ser Cys Leu Glu Ser Gln Pro Thr Ile
 130 135 140
 Arg Asn Gln Gly Tyr Ser Thr Val Thr Phe Asp Gly Ala Pro Ser Tyr
 145 150 155 160
 Gly His Thr Pro Ser His His Ala Ala Gln Phe Pro Asn His Ser Phe
 165 170 175
 Lys His Glu Asp Pro Met Gly Gln Gln Gly Ser Leu Gly Glu Gln Gln
 180 185 190
 Tyr Ser Val Pro Pro Pro Val Tyr Gly Cys His Thr Pro Thr Asp Ser
 195 200 205
 Cys Thr Gly Ser Gln Ala Leu Leu Leu Arg Thr Pro Tyr Ser Ser Asp
 210 215 220
 Asn Leu Tyr Gln Met Thr Ser Gln Leu Glu Cys Met Thr Trp Asn Gln
 225 230 235 240
 Met Asn Leu Gly Ala Thr Leu Lys Gly Met Ala Ala Gly Ser Ser Ser
 245 250 255
 Ser Val Lys Trp Thr Glu Gly Gln Ser Asn His Gly Ile Gly Tyr Glu
 260 265 270
 Ser Asp Asn His Thr Ala Pro Ile Leu Cys Gly Ala Gln Tyr Arg Ile
 275 280 285
 His Thr His Gly Val Phe Arg Gly Ile Gln Asp Val Arg Arg Val Ser
 290 295 300
 Gly Val Ala Pro Thr Leu Val Arg Ser Ala Ser Glu Thr Ser Glu Lys
 305 310 315 320
 Arg Pro Phe Met Cys Ala Tyr Pro Gly Cys Asn Lys Arg Tyr Phe Lys
 325 330 335
 Leu Ser His Leu Gln Met His Ser Arg Lys His Thr Gly Glu Lys Pro
 340 345 350
 Tyr Gln Cys Asp Phe Lys Asp Cys Glu Arg Arg Phe Ser Arg Ser Asp
 355 360 365
 Gln Leu Lys Arg His Gln Arg Arg His Thr Gly Val Lys Pro Phe Gln
 370 375 380
 Cys Lys Thr Cys Gln Arg Lys Phe Ser Arg Ser Asp His Leu Lys Thr
 385 390 395 400
 His Thr Arg Thr His Thr Gly Lys Thr Ser Glu Lys Pro Phe Ser Cys
 405 410 415
 Arg Trp His Ser Cys Gln Lys Lys Phe Ala Arg Ser Asp Glu Leu Val
 420 425 430
 Arg His His Asn Met His Gln Arg Asn Met Thr Lys Leu His Val Ala
 435 440 445
 Leu

<210> 321
 <211> 9
 <212> PRT
 <213> Homo sapien and Mus musculus

<400> 321
Pro Ser Gln Ala Ser Ser Gly Gln Ala
1 5

<210> 322
<211> 9
<212> PRT
<213> Homo sapien and Mus musculus

<400> 322
Ser Ser Gly Gln Ala Arg Met Phe Pro
1 5

<210> 323
<211> 9
<212> PRT
<213> Homo sapien and Mus musculus

<400> 323
Gln Ala Arg Met Phe Pro Asn Ala Pro
1 5

<210> 324
<211> 9
<212> PRT
<213> Homo sapien and Mus musculus

<400> 324
Met Phe Pro Asn Ala Pro Tyr Leu Pro
1 5

<210> 325
<211> 9
<212> PRT
<213> Homo sapien and Mus musculus

<400> 325
Pro Asn Ala Pro Tyr Leu Pro Ser Cys
1 5

<210> 326
<211> 9
<212> PRT
<213> Homo sapien and Mus musculus

<400> 326
Ala Pro Tyr Leu Pro Ser Cys Leu Glu
1 5